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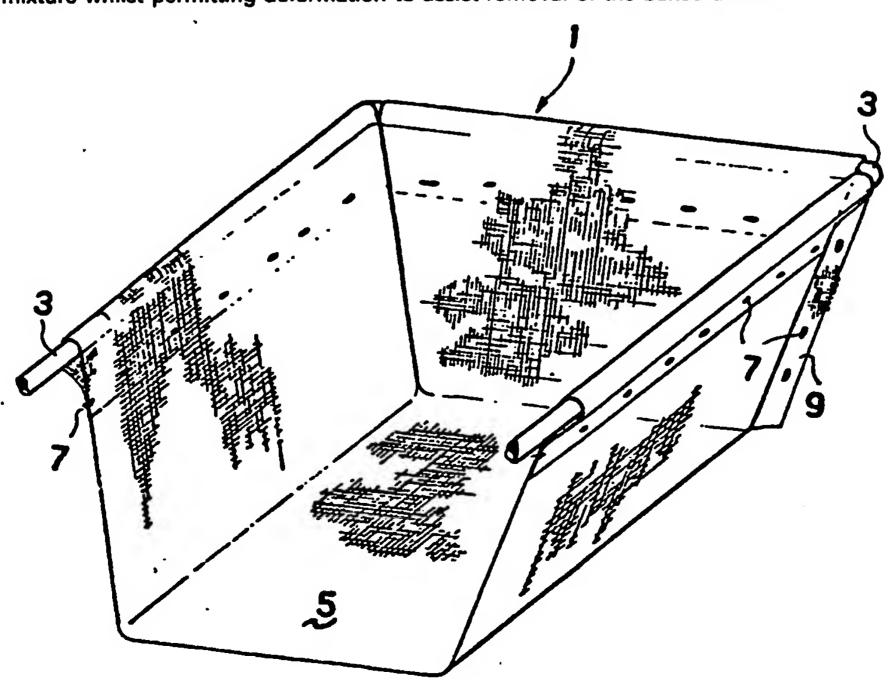
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GB 0912347 GB 0689943 GB 0372566 **US 4092909** 

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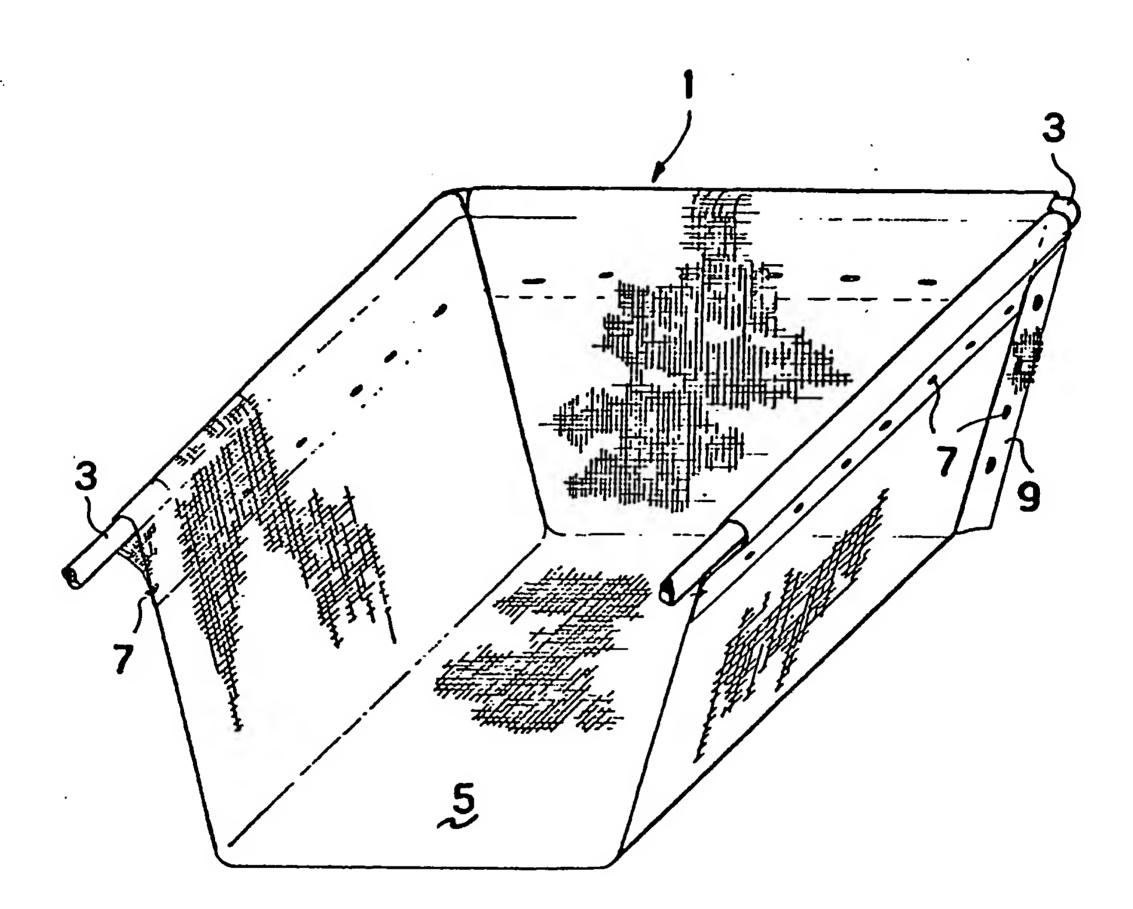
## (54) Improvements in moulds for baking

(57) A mould 1 for baking, in particular for baking bread, has a rigid frame 3 to which a perforate deformable support 5 of stainless steel fabric is fastened to provide a cavity for the baking mixture, e.g. dough. The support 5 is coated with a layer of heat resistant, non-stick material such as silicone of a food contact grade to facilitate removal of the baked article. The stainless steel fabric assumes the shape of the article to be baked and is sufficiently rigid as not to be deformed under the effects of the baking mixture whilst permitting deformation to assist removal of the baked article.



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## SPECIFICATION

Improvements in moulds for baking

The present invention relates to improvements 5 in moulds for baking and, in particular, though not exclusively, moulds for baking mixtures such as bread dough.

For loaves or doughs containing yeast and baked in a mould, such as, for example, 10 loaves called sandwich loaves, brick loaves, tin loaves or the like, moulds made of folded sheet metal have always been used up to now with the joins between the two sheet-metal ends being made by means of welding, 15 clamping or any other suitable assembly method. However, these moulds have many

disdavantages.

On the one hand, it is practically impossible to bake bread in such a mould without greas-20 ing the mould beforehand. A person skilled in the art is well aware that such greasing is absolutely essential to allow the loaf to be removed from the mould. On the other hand, because of the use of greases and the diffi-25 culty of removing the loaf from the mould after baking without leaving any residues, it is also necessary to clean the moulds regularly and often.

It is an object of the present invention to 30 provide a mould for baking which overcomes or at last mitigates the above-mentioned problems of the known moulds.

According to the present invention, there is provided a mould for baking comprising a 35 rigid frame and a perforate deformable support fastened to the frame to provide a cavity for a baking mixture, the support being coated with a material which is acceptable for food contacting use, is resistant to the baking tem-40 perature and prevents the adhesion of the baking mixture to the support.

By the present invention, the baking mixture is contained in a perforate deformable support coated with a heat resistant, non-stick 45 material of food contact grade which makes it possible to omit the previous step of greasing these mould. The support assumes the shape of the article to be baked, for example a loaf, and is sufficiently rigid as not to be deformed 50 under the effect of the baking mixture whilst permitting deformation of the support to assist removal of the baked article.

Preferably the support consists of metal fabric, for example made of stainless steel. 55 However, the support may also consist of a synthetic fabric, a perforated synthetic or metal foil or a netting of suitable mesh size.

Advantageously, the support is coated with a layer of silicone of food-contact grade. Nev-60 ertheless, any other organic or inorganic product satisfying the requisite conditions may be used.

Preferably, where provided, a join between adjoining walls of the support takes the form 65 of an external seam. In this way the seam is

not visible on the inside of the support. Such external seam may be made by means of welding, folding or crimping.

Moulds according to the present invention 70 have been found to be particularly useful for baking loaves. The use of a perforate deformable support allows substantially improved heat transmission in comparison with the known moulds made from sheet metal. As a result, a 75 saving in energy during the steps of proving, fermentation and baking may be obtained. Additionally, the loaf or mould may be cooled without risking condensation of the crust.

The provision of a coating of heat resistant, 80 non-stick material of a food contact grade on the support simplifies the steps preparatory to baking by eliminating the mould greasing operation and reducing the mould cleaning operation to a minimum because the loaf does 85 not stick and consequently there are no residues of burnt dough which would otherwise further increase adhesion to the support. As a result, a considerable saving in time may be obtained which together with the potential 90 energy saving above-mentioned can, of course, have a bearing on the cost price of the loaf produced. The absence of grease does not affect the test of the crust of the loaf.

A further advantage of the coating of heat 95 resistant, non-stick material of food contact grade is that it permits a higher level of hygiene to be maintained. In fact, because greasing is usually carried out by spraying, 100 the elimination of the greasing operation avoids splashes of grease in the surrounding area.

Another advantage of the mould according to the invention is that the loaf may be given 105 a wrinkled surface effect by crases in the support when can contribute to the appearance of the loaf as being one made in a small bakery.

The invention will now be described in 110 more detail, by way of example only, with reference to the accompanying drawing in which the single Figure is a perspective view, partly cut-away for clarity, of a mould according to the present invention.

The mould 1 shown in the drawing consists 115 of a rigid rectangular frame 3 made of stainless steel tube or rod and a perforate deformable support 5 made of stainless steel metal fabric. The support 5 is fastened to the frame

120 3 by turning the metal fabric around the frame and attaching the fabric to itself in the part constituting the wall of the mould by welding as indicated by reference numeral 7. Alternatively, the frame may be constructed to 125 permit the metal fabric to be fastened to the

frame by crimping.

The side and end walls of the support 5 are joined at each corner of the mould by a join provided by an external seam 9 visible to-

130 wards the outside of the mould. The join is

made by means of welding or crimping. Any folds or angles are advantageously obtained by means of pressing or press forming in known manner.

The metal fabric of the support is coated with a layer of silicone (not shown) which is of a food contact grade, heat resistant and non-stick under the baking conditions.

The metal fabric of the support assumes the shape of the loaf, in this instance a rectangular cavity is formed for producing a brick loaf, and is sufficiently rigid in use to prevent deformation of the mould under the effect of the dough during the proving, fermentation and baking operations but can be deformed to assist removal of the baked loaf.

Several rigid frames may be joined together to form a multiple mould structure arranged so as to obtain the necessary dimensions for use with conventional transport devices, such as carrieages, guide rails and the like, upstream of the oven, inside the oven and downsteam of the oven.

It will be understood that the invention is not limited to the embodiment above-described, for example the support can be shaped by stamping, folding or any other shaping technique without there necessarily being a seam between adjoining walls.

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- 1. A mould for baking comprising a rigid frame and a perforate deformable support fastened to the frame to provide a cavity for a baking mixture, the support being being coated with a material which is acceptable for food contacting use, is resistant to the baking temperature and prevents the adhesion of the baking mixture to the support.
- 40 2. A mould according to claim 1 wherein the support consists of a metal or synthetic fabric, a perforated metal or synthetic foil or netting and is sufficiently rigid as not to be deformed under the effect of the baking mixture.
  - 3. A mould according to claim 2 wherein the support consists of a stainless steel fabric.
- 4. A mould according to any one of the preceding claim wherein the support is coated 50 with silicone of a food-contact grade.
  - 5. A mould according to any one of the preceding claims wherein the support is shaped by stamping or folding.
- A mould according to any one of the preceding claims wherein adjoining side and end walls of the support are joined by an external seam.
- A mould according to any one of the preceding claims wherein the support is fas tened to the frame by folding around the frame and attaching to tiself.
  - 8. A mould according to any one of claim 1 to 6 wherein the support is fastened to the frame by crimping.
- 65 9. A mould according to any one of the

- preceding claims wherein the support is formed with at lease one crease.
- 10. A mould according to any one of the preceding claims comprising a plurality of70 frames joined together to form a multiple mould structure.
  - 11. A mould for baking substantially as hereinbefore described with reference to the accompanying drawing.

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